

### AMENDMENTS TO THE SPECIFICATION

Please replace paragraph [0010] with the following paragraph:

“However, the aforementioned sputtering method has been used instead of an alternative method such as chemical vapor deposition (CVD) method with good step coverage for forming a copper layer as well as a barrier layer simply because of the poor adhesion problem between the barrier layer and the copper layer. In addition, the ~~sputtering~~ sputtering method does not cause contamination problem at the boundary between the copper layer and the barrier layer, whereas the chemical vapor deposition (CVD) method creates the contaminant problem due to the contaminants such as carbon (C) and ~~fluor~~ fluorine (F) at the boundary between the copper layer and the barrier layer. It has been presumed that the contaminants such as carbon (C) and ~~fluor~~ fluorine (F) are the cause of a poor adhesion between the copper layer and the barrier layer. However, no chemical vapor deposition (CVD) method capable of depositing copper material without accumulating contaminants during the deposition process, has been disclosed.”

Please replace paragraph [0025] with the following paragraph:

“Referring to FIG. 2A again, meanwhile, said adhesion layer 240a can be formed using one of the metallic elements and their alloys of non-carbonic metals such as ruthenium (Ru), rhenium (Re), nickel (Ni), palladium (Pd), osmium (Os), iridium (Ir) and platinum (Pt), where said each metallic alloy contains an atomic ratio of at least 50% or more of each non-carbonic metals. On the other hand, tantalum ~~[[Ti]]~~ (Ta) or tantalum family of alloys, titanium (Ti) or titanium family of alloys, or tungsten (W) or tungsten family of alloys, may be used for forming a barrier layer (230a), but when a liquid form of copper source material such as (hfac) Cu(vtms) is used for subsequently forming a copper layer on top of said barrier layer 230a by using a chemical vapor deposition method, which procedure will be described later, the adhesion between said barrier layer 230a and said copper layer formed on said barrier layer 230a becomes poor, thereby said barrier layer 230a is ‘peeled-off’ during the chemical-mechanical polishing process for removing the excessive copper material from the top surface of the substrate for a subsequent processing step, causing severe defects. The cause of said ‘peel-off’ problem is presumable due to the presence of contaminants such as carbon and fluorine between said barrier layer 230a and said copper layer when an adhesion layer 240a is lacking. The afore-described tantalum (Ta) or

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tantalum family of alloys, titanium (Ti) or titanium family of alloys, tungsten (W) or a tungsten family of alloys, and their metallic nitrides and the materials containing a small amount of silicon react with the carbon material and easily forms carbides such as Ti--C, Ta--C, W--C or Si--C, thereby an adhesion layer 240a between said barrier layer 230a and said copper layer is preferably necessary using a non-carbonic metals that do not react with carbon to form their carbonides, thereby a good adhesion property between said barrier layer and said copper layer according to the present invention is expected.”